



UCE MOCKS ITEM POOL

CHEMISTRY PAPER 1

MODULE 2: INDUSTRIAL PROCESSES

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ITEM 3: WAKISHA Joint Mock Examinations 2024

Kilembe mine on the foothills of Rwenzori Mountain is estimated by government geologists to contain tonnes of the Ore that contain copper. The production of copper was halted due to low copper prices and political instability. However, the demand for copper has since increased. The ministry of energy and mineral development has cleared an investor to restore the mining of copper with minimal environmental impact. The youth in the area are wondering how the extraction process will be done. The head teacher has appointed you to explain to the youth how the process will be done and how they can benefit from it.

TASK:

Prepare a presentation that you will use during the sensitization.



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ITEM 3: UTEC Mocks 2024

One of the large-scale uses of sulphuric acid is to manufacture fertilizers for high crop yields. To ensure that sulphuric acid is available at a cheaper cost, government has cleared a local investor to set up a sulphuric acid production plant in Kilembe mines in Kasese district. However, the community members are worried about its environmental effects and they would like to know how the production process will be carried out.

The chairperson of the village where the plant is proposed to be constructed has called for the village meeting and you have been invited to make a presentation.

TASK

Make a write up of the message you will deliver during the village meeting.



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ITEM 3: UNNASE Mock Examinations 2024

Farmers in a rural area petitioned the government to establish a local ammonium fertilizer manufacturing plant, which would provide a steady supply of affordable fertilizers. The government agreed to the proposal, but other residents are concerned about the environmental impact of the factory.

To prevent resistance and ensure the project's success, it is crucial to provide the residents with adequate information and about the production process and its environmental safeguards.

TASK:

Write down all the necessary information that is needed by the residents.



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ITEM 3: WAKISHA Joint Mock Examinations 2024

A certain rice scheme has been growing rice for a long period of time. However the yield has greatly reduced. After analysis, the manager found out that the soils had become Nitrogen deficient and would require Nitrogen based fertilizers. The manager has been informed that the fertilizer can be made industrially from Nitrogen.

TASK:

As a chemistry student, make a write up to the manager on how the fertilizer can be made.



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ITEM 4: UTEC Mocks 2024

An investor dealing in paper recycling is facing a challenge of high cost of sodium hydroxide which is so crucial to come up with high quality papers. He is planning to set up sodium hydroxide production plant to cut the costs. However the residents are protesting against the establishment of this plant and their concern is about its impact on the environment and how they will benefit from the plant. The investor has contacted you to guide him on what to tell the residents.

TASK:

As a chemistry learner, prepare a report that will guide him on his presentation.



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ITEM 4: UNNASE Mock Examinations 2024

Builders in Uganda have been experiencing collapsing structures due to poor cement quality. To improve their situation, they requested the government to build local cement manufacturing plant since there are required raw materials in Uganda and avoid relying on its importation. The idea is to produce cement of good quality at subsidized prices. Although the government approved the plans, local residents are concerned about manufacturing process and potential environmental impacts from the cement plant. To avoid resistance from the locals, it is essential to provide them with clear information about the production process, environmental safeguards and benefits.

TASK: Write down all the necessary information that is needed by the local residents



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ITEM 4: STEM Mocks Examinations 2024

Henry is interested in setting up a steel iron factory in Kabale District without affecting the ecosystem. This area is rich in iron ore. However, he lacks the knowledge of sustainable production of high-quality steel iron products.

TASK:

As someone with knowledge of chemistry give him information that will enable him to use the iron ore to set up the industry



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ITEM 2: ASSHU Bushenyi District Mocks 2024

A large chemical plant in a rural area is considering producing ammonia to be used in making fertilizers in order to meet the growing demand for fertilizers in the agricultural industry. However, many residents in the area lack knowledge on how the production process can be effected with less impact to the environment.

Your fellow students also wish to understand the same. You have been selected to make a presentation to them by your teacher.

TASK:

As a learner of chemistry, make a write up of the message that you will deliver to them.



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ITEM 4: SISEB Mock Examinations ©2024

In an area known for planting many bananas, the people of this area have realized that their bananas have lost market and they have plans of giving them to animals. However, they have heard that bananas can be converted into sanitizer, a useful product that can earn profits. The residents have limited knowledge on how the process can be carried out.

TASK

As a chemistry student, make a written message to address the matter



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Item 3. SHURE Mock Examinations 2024

Sodium hydroxide is used in the manufacture of soapy detergents and commonly as a laboratory reagent in all the secondary schools in Uganda. To ensure that sodium hydroxide is readily available for the schools. Government has cleared Ugandan investor to set up sodium hydroxide production plant near your school. However, the community members are concern about the environment effects and how the process will occur.

The head teacher has selected you to sensitize the community members.

TASK:

As chemistry student, make a write up you will use during the presentation.



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ITEM 4: Acholi Secondary Schools Examinations Committee 2024

Ethanol is a major component in sanitizers' production. Following an increased demand for hand sanitizers countrywide due to Corona virus and Red eyes recently in the country. The government has hired a local investor to set up an ethanol brewing plant in Kitgum industrial area to make more ethanol to be used in sanitizers. The Kitgum Municipal Council would like to know the production process and how the plant will impact on the environment of their town..

TASK:

Make a write up you will deliver to Kitgum Municipal Council answering their concerns?



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ITEM 3: ASSHU Bushenyi District Mocks 2024

A copper mine is proposed for development in Karamoja district, however the production process require large amounts of energy and water which could affect the environment. Additionally, many residents are also wondering how the production process and its benefits can be balanced with minimal effects.

TASK

As a learner of chemistry, make a useful write up to them.



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ITEM 3: SISEB Mock Examinations ©2024

Locals in a certain district rear fatty cattle that they sell to earn a living. One of the investors is interested in setting up a soap producing plant to create market for the cattle. The locals are wondering how the process would be carried out and the associated results.

TASK

As a chemistry student, write a message that the investor should deliver to the locals on meeting them about the matter.



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Item 4: SHURE Mock Examinations 2024

Ethanol is one of the raw materials in the manufacture of sanitizers. Ugandan schools are highly infested by bacteria that causes red eyes. The minister of health Ruth Acheng advised washin produced.

TASK:

As a student of Chemistry, educate the community members on how to go about it



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ITEM 3: Acholi Secondary Schools Exams Committee 2024

Ammonia is used on a large scale for the manufacture of laundry detergent for removing temporary hardness, it's used in large scale refrigeration plant and in the production of Nitrogenous fertilizers which are highly needed, by the farmers. In an attempt to continue supporting the country's agricultural sector among other sectors, the government is seeking to ensure a steady availability of ammonia and thus has hired an investor to set up an ammonia production plant with minimal environmental impact in Pabo town. However, the community in Pabo would like to know how the production process will be carried out and how will they benefit from this plant.

TASK: As a chemistry student, make a write up you will use during the presentation.



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ITEM 3: ERETA Education Consult Mocks 2024

Significant iron deposits were located in one of the hills in Uganda. An investor was contacted by government to setup an iron and steel rolling factory to tap into the opportunity. However, the residents seem not to understand how iron can be obtained from its natural sources and consequently its benefits and are resisting the project fearing the associated environmental impacts. As a senior four candidate with the knowledge of chemistry, you have been contacted to create awareness to the members confident that you can provide the necessary information.

TASK:

Write a presentation you will use upon meeting them.



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ITEM 4: @2024 MEBU MOCKS

Grain Pulse limited is one of Uganda's leading phosphate fertilizer manufacturer. It uses sulphuric acid as the main raw material. In a bid to cut the costs on the high revenue imposed on importing the acid, the management has contracted a production unit to set up a sulphuric acid production plant with minimal environmental concerns. A certain Village in Kasese district has been selected for the plant. However some residents in the region claim that the plant will not benefit them at all.

The science club members in your school would like to know how the production process will be carried out. They are seeking for guidance prior to addressing the school assembly.

TASK.

As a chemistry learner, make a write up they will use while addressing the assembly.



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ITEM 3: Masaka Diocesan Examinations Board

Many farmers in Eastern Uganda grew a lot of sunflower expecting good market outside Uganda. Unfortunately, there is no market. After getting government SACCO money, a group of some farmers want to buy the sunflower invest into Soap manufacturing but they lack the knowledge of the process and its effects

TASK

Help the farmers achieve their objective.



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Item 4: KAMTEC Examinations Board

Recently, there has been country wide complaints of the high fuel costs. These include the high costs of petrol, diesel, paraffin among others. As a result, the government has agreed with some foreign investors to set up another oil refinery plant in Kyakayege village, Sembabule District to tap the oil deposits in the area. The local residents are however, protesting the establishment of the plant in their area, claiming that the government is going to steal their land and there is no importance of a plant to them. The locals also do not know how the refinery process will be done. A radio talk show has been organised on one of the local radio stations by the District Development Officer (DDO) and the Local council representative to sensitise the locals on the issues at hand.

TASK: As a learner of Chemistry, prepare a presentation you would make upon invitation.



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ITEM 4: ERETA Education Consult Mocks 2024

Sulphuric acid is used in the manufacture of paint. Due to the increased demand of paint countrywide, the government is seeking to ensure that there is a steady supply of sulphuric acid to be used to manufacture the needed paint. The government has hired an investor to set up a sulphuric acid manufacturing plant in kitoogo.

The locals of kitoogo town are concerned about how the production process will be conducted, its environmental effects and how they will benefit from the project.

TASK

Prepare a presentation you will make answering concerns of the locals.



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Item3: @2024 MEBU MOCKS

In many industries, sodium hydroxide is used to make wood pulp and paper, textiles, soaps and detergents and as a drain cleaner. To ensure that sodium hydroxide is readily available and at a cheaper cost, one of the managers of a textile industry is planning to set up a sodium hydroxide production plant. Unfortunately, the residents have raised concerns about its environmental effects and their valuable land about to be taken by the investor. The science club in your school is also wondering how the production process of sodium hydroxide will be carried out. As a result, the chairperson of the club has appointed you to make a presentation to be published in one of the local newspaper.

TASK;

As a chemistry learner, prepare a brief message that you will use during the presentation.



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ITEM 4: Masaka Diocesan Examinations Board

There is high demand of chlorine in Uganda for treating water due to increased rate of water pollution. An investor wants to tap into the opportunity to manufacture chlorine at Kabale near Lake Bunyonyi. However, the residents seem not to understand how the process will occur plus it's consequences and are resisting the project.

As a senior four candidate with the knowledge of chemistry, you are required to create awareness to the members and provide the necessary information.

TASK

Write a presentation you will use upon meeting them.



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ITEM 3: KAMTEC Examinations Board

Soap is the chief material commonly used to facilitate washing. Of recent, there has been countrywide outcries to the government about the high costs of soap for domestic use. This is partly because of the few industries producing soap in the country. To ensure efficient supply of soap, recently the government secured some land for the local investors to set up another soap production plant in one of the villages in Tororo District. However, the local people are concerned about its environmental impact and their valuable land that is about to be taken by the investor. The community members are also wondering how the process of soap production will take place. As a result, the District Chairperson has called for a meeting with the investor and the Local Representatives.

TASK

As a chemistry learner, make a write up you will use during the presentation upon invitation.



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ITEM 3: KAMSA joint Mock Examinations 2024

Sodium hydroxide is an inorganic compound that is mostly used by the chemical industries to manufacture a wide range of products like soap, paper, and petroleum products among others. This has increased demand from local manufacturing industries in the country. Therefore, to ensure that it is readily available and at a cheaper cost, the government of Uganda has decided to set up a sodium hydroxide manufacturing plant in your village. However, the local community is concerned about its environmental effects and how the process of production will occur.

You have been selected as a chemistry student to sensitize the local community about the process of production of sodium hydroxide and its environmental effects.

TASK.

Prepare a presentation you will deliver during the meeting with the local people.



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ITEM 3: Jinja Joint Examinations Board

In some districts of Uganda like Tororo district, farmers get very low crop yields due to poor soils that has led to persistent famine in the area. Ammonium nitrate is one of the effective fertilizers used to improve crop yields. The ministry of agriculture and animal husbandry has entrusted an investor to put up an ammonium nitrate production plant in Tororo district such that the fertilizer is got at cheap cost. However, the community near the site is worried about its effects on the environment and how the environmental process will occur. The head of department has appointed you to sensitize the community.

TASK: Prepare a presentation you will make during the meeting.



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ITEM 3: ASSHU Ankole Joint Examination 2024

After the discovery of bauxite in Manafwa district, the government is considering expanding the extraction industry to boost economic growth with minimal environmental effects. However, the majority of the locals are wondering how that can be achieved and thus resistant. The chairperson has then called for the sensitization meeting to address the challenge at hand.

TASK:

As a learner of chemistry make a write up of what you expect to be delivered in the meeting.



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ITEM 4: Aceiteka Joint Mock Examinations 2024

The number of water treatment plants has increased all of which use chlorine in treating water. To ensure that chlorine is readily available and at a cheaper cost, government wants to clear a local investor to set up a chlorine production plant.

However, the community is concerned about its environmental effects and how the production process will occur. The class teacher has appointed you to sensitize the other learners about the plant.

TASK:

Make a write up to use upon meeting the classmates.



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ITEM 4: KAMSA joint Mock Examinations 2024

Air is the mixture of different components. It contains 21% oxygen, 78% nitrogen, 0.03% carbon dioxide water vapour and inert gases. Due to a wide spread of respiratory illnesses caused by COVID-19 there was an increased demand for oxygen by the patients in the hospitals. The government supply of oxygen is not enough and is planning to setup an oxygen production plant with minimal environmental impact.

However, the local people around your school would like to know how the process of production will be carried out.

TASK

As a chemistry student, make a write up you will use during the presentation.



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ITEM 4: Jinja Joint Examinations Board

Bugiri sugar factory which has just been setup is disposing off molasses which would be used to make ethanol. Ethanol is at a high demand and it's used to make essential substances like sanitizer. The locals around are making ethanol on small scale and it can not meet the demands. However, the government is planning to set up an industry to produce ethanol with minimum environmental impact. However, the community would like to know the process of production and how it would be carried out.

TASK: As a chemistry student, make a write up you will present to the community members.



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ITEM 4: ASSHU Ankole Joint Examination 2024

A cement company in Tororo is facing backlash from local residents and environmental groups over its plans to build a new factory in order to produce cement since there are increasing demands by Ugandans. Despite it being of a great advantage, the locals are worried about how the company will balance between its interests and environment protection. Your colleagues in a certain school are also having a similar situation and thus your teacher has asked you to write a message to them.

TASK: Make a write up of the message that will help them using the knowledge of chemistry



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ITEM 3: Aceiteka Joint Mock Examinations 2024

Significant copper reserves have been discovered in Kirembe in Kasese district government wants to set up a copper extraction and processing factory to tap into the opportunity. Nevertheless, the local members are ignorant of the procedures needed to extract the valuable material and its impact. As a SENIOR FOUR candidate with the knowledge of chemistry, the village members have high expectations in you to provide the necessary information.

TASK

Create a sensitization message to the community.



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ITEM 3: Entebbe Joint Examination Bureau

A large chemical plant in a rural area is considering producing ammonia to be used in making fertilizers in order to meet the growing demand for fertilizers in the agricultural industry. However, many residents in the area lack knowledge on how the production process can be carried out with less impact to the environment.

Your fellow students also wish to understand the same. You have been selected to make a presentation to them by your teacher.

TASK

As a learner of chemistry, make a write up of the message that you will deliver to them.



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ITEM 3: UMTA Joint Examinations 2024

Agriculture is very difficult in a certain part of Uganda due to acidic soils because of Sulphur deposits beneath the soil layers. As a student with knowledge of chemistry you notice that there is need to convince the community members to abandon Agriculture but use the available mineral present in the soil to manufacture a very useful acid from it.

TASK:

Explain to them how the acid can be obtained from this type of soil.



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ITEM 3: Mukono Examination Council 2024

Due to the introduction of the policy: 'Buy Ugandan Build Uganda 'BUBU', the top management of a soap manufacturing industry decided to start producing the sodium hydroxide locally. It has been cleared by the relevant authorities including the National Environment Management Authority and local council leaders. A workshop has been organized for all the stakeholders involved and you have also been invited. The local council leaders wish to understand how the production will be done while the NEMA need a report on the environmental impact of the factory activities.

TASK:

Use the knowledge of chemistry to write speech you would present during the workshop.



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ITEM 3: Entebbe Joint Examination Bureau

A copper mine is proposed for development in Karamoja district. However the production process requires large amounts of energy and water which could affect the environment. Additionally, many residents are also wondering how the production process and its benefits can be balanced with minimal effects.

TASK

As a learner of chemistry, make a useful write up to them.



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ITEM 4: UMTA Joint Examinations 2024

There is a salty lake in certain area and people refer to it as a miraculous Lake, for this reason so many people carry out traditional rituals on it.

TASK:

As a student of Chemistry explain to them how to use its water to manufacture sodium hydroxide.



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ITEM 4: Mukono Examination Council 2024

The richest iron ores in Uganda occur in Kigezi region in form of high grade micaceous hematite. The government has cleared a local investor to set up an iron production industry in the area. The local residents feel that the government wants to steal their land and the industry will not benefit them. They also wonder how iron/steel bars can be obtained from mere rocks. They have organized protests at all the district headquarters in the region to voice their concerns. The government has agreed to respond to their issues through a talk show on the local radio. You have been invited to participate in the radio talk show.

TASK:

As a learner of chemistry, prepare a presentation you would give on the talk to calm down the residents.



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